



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,569	08/14/2001	David Cooke	F3271(C)	9161

201 7590 10/07/2004

UNILEVER
PATENT DEPARTMENT
45 RIVER ROAD
EDGEWATER, NJ 07020

EXAMINER

HENDRICKS, KEITH D

ART UNIT	PAPER NUMBER
----------	--------------

1761

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,569

Applicant(s)

COOKE ET AL.

Examiner

Keith Hendricks

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 5-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Art Unit: 1761

DETAILED ACTION

Status of Claims

Claims 1-13 and 15 are currently pending.

Claims 5-6 remain objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase added to claim 12, "wherein the pH of the mixture remains above 5.5", is indefinite. It is unclear if this (a) refers to the method by which the product was made, i.e. referring to the method steps of claim 1, or if (b) this is to somehow suggest that the pH of the fermented mixture, even after being combined with any number of other food elements to produce the final claimed food product, is to "remain above 5.5". The specification does not appear to support the latter, and it is unclear as to how this could be produced. The claim is complicated by the use of the terms "food product", "composition" and "mixture", for which the metes and bounds of each have not been set forth.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1761

Claims 12-13 remain rejected under 35 U.S.C. 102(b) as being anticipated by Schol et al. (US PAT 5,308,628).

Applicant's arguments filed June 02, 2004, have been fully considered but they are not persuasive. Applicant states that "the present amendment further distinguishes Stohl [sic] et al. by reciting that the pH of the mixture of the food product remains above 5.5." This is not deemed persuasive for the reasons of record. Initially, as stated above, applicant's characterization of claim 12 is misleading, and unsupported by the specification. Applicant has not demonstrated that the pH of the final resulting food product remains above 5.5, and has not demonstrated a method by which the fermented mixture of claim 1 may be combined with other food product components, as in claim 12, and still maintain an individual pH of 5.5.

Thus, the product claims remain anticipated by the reference for the reasons of record.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

i) Claims 1,3 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schol et al. The reference and rejection are taken as cited in a previous Office action.

Applicant's arguments filed June 02, 2004, have been fully considered but they are not persuasive. At page 4 of the response, applicant refers to the examples of Schol et al., stating that since the examples do not go above a pH of 4.45, then the rejection is improper. This is not persuasive for the reasons of record. Just as applicant is not limited by their examples, neither is the reference limited to the exemplified teachings therein. The fact remains that the reference teaches a specific range the method encompasses, and the specific endpoint with a pH of 5.5. The reasoning for the rejection stands of record.

At page 5 of the response, applicant attempts to distinguish their invention by stating that the "tart" frozen dairy products of the reference would not render obvious the instantly-claimed invention. This is not deemed persuasive. The product resulting from applicant's claimed method would also be expected to be "tart", as it has a pH of "above 5.5" (claim 1) and in the range of "5.8 to 6.2" (claim 2).

Art Unit: 1761

These are acidic pH's, and provide a tart taste to fermented milk products due to the lactic acid produced by the bacteria. Thus, applicant has not provided a patentable distinction between their invention and that of the prior art, as explained previously on the record.

Again, there does not appear to be any patentable distinction between a pH of 5.5, and that which "remains above pH 5.5." It is acknowledged that these are different amounts. However, the phrase "above pH 5.5" encompasses a pH only slightly above, for example, 5.501. Applicant has not demonstrated any patentable distinction, advantage or functional difference between the prior art method/product and that instantly claimed. In fact, applicant's own specification, at the top of page 6, states that the pH of the mixture should be "at or above 5.5", thus supporting the position that there is no substantial difference between the two amounts, and that both would function equally well within the claimed invention. Absent any clear and convincing evidence and/or arguments to the contrary, it would have been obvious to one of ordinary skill in the art to have utilized the claimed method while stopping the fermentation, or allowing the fermentation to stop naturally, at a point slightly above pH 5.5.

ii) Claims 1-4, 7-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aebischer et al. (US PAT 6,004,800, of record), in view of Tamime (Yoghurt Science and Technology). The references and rejection are taken as cited in a previous Office action.

Applicant's arguments filed June 02, 2004, have been fully considered but they are not persuasive. At page 5 of the response, applicant states that

[A]naerobic fermentation of polysaccharide-producing strains of lactic acid bacteria is accompanied by the production of acid, resulting in a lowering of the pH. For example in Schol et al., the pH is reduced to below 4.45. The undersigned has been informed that in the absence of any means of regulation, the pH will therefore decrease during a fermentation of from 10 to 20 hours to well below 5.5.

Aebischer et al. describes maintaining the pH at between 6 and 7.3. Regardless of how this is achieved, this appears clearly to be a description of pH regulation.

This is not deemed persuasive for the reasons of record. Applicant's arguments are unsupported and unsubstantiated. Further, the information applicant provides is not in the form of a declaration, and there is no reliable source cited from which it is derived.

Again, it is maintained that the Aebischer reference states that "when fermentation has ended, the pH of the resulting culture can be lowered to 5 – 5.5 by the addition of lactic acid." This addition of acid to modify the pH does not occur during fermentation, and thus would not be relevant to the instant claims. The referenced statement regarding fermentation provides the teaching that "the medium can be allowed

Art Unit: 1761

to ferment... with the pH being maintained at 6- 7.3.” This does not suggest that acids or bases are added to the culture during fermentation. It simply states that the pH is “maintained.” Thus, since the primary reference does not specify a means by which this is maintained, one of ordinary skill in the art would have been motivated to look to the prior art, for example a common textbook such as that of Tamime et al., for guidance as to how this is performed. Tamime et al. clearly demonstrate that in a known process of lactic acid fermentation of milk cultures, fresh non-fermented milk is added to the fermentation culture to “maintain the pH” at a given level. Thus, it would have been obvious to one of ordinary skill in the art to have cultured the *Leuconostoc mesenteroides* ssp. *cremoris* in MSK medium (skimmed cow’s milk), maintaining the culture at a pH in the range of 6-7.3, as the reference specifically states, while utilizing the known procedure for carrying this out, as shown by Tamime et al.

Regardless, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Further, it is noted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Finally, applicant states that “as to Tamime, the unfermented milk is apparently added during fermentation, thus regulating pH. In contrast, unfermented milk added in instant claim 11 is added to the already fermented mixture.” This is not deemed persuasive for the reasons of record. It is noted that the referenced process of adding non-fermented milk to the fermented culture is also found in instant claim 11. Applicant’s claims read upon the continuous production of the product, as in the reference, whereby unfermented milk is added to the fermented culture in order to take advantage of the already-existing culture conditions and existing lactic acid bacteria. Applicant’s claims do not clearly distinguish from the referenced process, and in fact, read upon such a procedure. In fact, as previously stated on the record, Tamime specifically teaches that the milk is fermented until it reaches a pH of 5.7, and only then is the non-fermented milk added to the mixture. This is the same process as instantly claimed.

Thus, instant claims 1-4, 7-12 and 15 remain rejected as obvious over the combination of references cited herein.

Art Unit: 1761

Conclusion

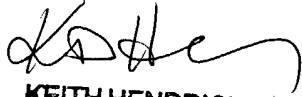
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0987.


KEITH HENDRICKS
PRIMARY EXAMINER